Environment Canada Environnement Canada

CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999 (CEPA 1999)

Scoping the Issues: Preparation for the Parliamentary Review of the *Canadian Environmental Protection Act, 1999*

Canada

Scoping the Issues, CEPA 1999

Library and Archives Canada Cataloguing in Publication

Main entry under title :

Scoping the Issues : Preparation for the Parliamentary Review of the *Canadian Environmental Protection Act, 1999* : Strengthening Legislation for a Sustainable Environment, a Healthy Population and Competitive Economy

Issued also in French under title: Diagnostic, préparation pour l'examen parlementaire de la *Loi canadienne sur la protection de l'environnement (1999)*

Co-publ. by Health Canada.

Cat. no. En84-13/2004E

ISBN 0-662-38952-2

1. Canada. Canadian Environmental Protection Act, 1999.
2. Environmental law – Canada.
3. Pollution – Law and legislation – Canada
I. Canada. Environment Canada.
II. Canada. Health Canada.

KE3619.G84 2004 344.71'06 C2004-980365-4

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Environmental Protection Series

EPS 1 / CC / 4

Report number with the qualifier EPS 1/CC/4
Subject Area Code
Report Category
Environmental Protection Series

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SCOPING THE ISSUES:

Preparation for the Parliamentary Review of the

CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999

Strengthening Legislation for a Sustainable Environment, a Healthy Population and a Competitive Economy

December 2004

Prepared by:

Environment Canada and Health Canada

FOREWORD

Section 343 of the *Canadian Environmental Protection Act 1999* (CEPA 1999) stipulates that the Act must be reviewed by a Parliamentary Committee every five years after its coming into force (on March 31, 2000). Environment Canada and Health Canada have prepared this paper to solicit public comment in helping to prepare advice for consideration during the Parliamentary review.

Purposes of this scoping document:

- **To provide background information to assist Canadians in developing and sharing their views on the issues that should be addressed during the Parliamentary Review of CEPA 1999**

- **To solicit feedback from Canadians on issues in CEPA 1999 that Environment Canada and Health Canada have identified for consideration in preparing for the Parliamentary Review.**

This document represents the initial perspectives of officials in Environment Canada and Health Canada. It is not intended to reflect the position of the government.

This document reflects observations of Environment Canada and Health Canada based on just over four years of experience in implementing CEPA 1999. This experience includes the departments' assessment of the issues and views that were raised by various stakeholders and government officials during these last four years. This document also reflects the departments' perspective on how environmental management and the related protection of human health in Canada need to evolve.

This document is intended to inform the public about what Environment Canada and Health Canada see as issues to consider in the next review period and to seek feedback on those issues. The document uses various questions to assist in soliciting your views. You will note that there are two types of questions; some of the questions in the document are open-ended and related to broad policy issues, while other questions are more focused, since they are related to specific technical issues. Along with the questions raised throughout the document, readers are asked to consider the following questions:

- *Do you agree with the issues identified by the departments?*
- *Do you have additional issues?*
- *How would you suggest CEPA 1999 and/or its implementation evolve to address these issues?*

Information on the web-based consultations, including the procedure for providing electronic feedback is posted on the CEPA Environmental Registry website at: http://www.ec.gc.ca/CEPARegistry/review/CR_participation/default.cfm. **Feedback should be sent by end of business on February 11, 2005.**

105-01860/

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SECTION 1: INTRODUCTION

The Canadian Environmental Protection Act, 1999 (CEPA 1999) came into force on March 31, 2000 following an extensive Parliamentary review of the "original" 1988 CEPA. Its full title states that it is "An Act respecting pollution prevention and the protection of the environment and human health in order to contribute to sustainable development."

The Ministers of the Environment and Health jointly administer the provisions of CEPA 1999 regarding new and existing substances (including products of biotechnology). The Minister of Health administers research and guideline development related to human health. The Minister of the Environment administers all other aspects of the Act. (Note that in this paper the term "Ministers" refers to the Ministers of the Environment and Health and the term "Minister" refers to the Minister of the Environment.)

CEPA 1999 stipulates that a Parliamentary Committee must review the Act every five years after it comes into force. The Parliamentary Committee will conduct a review of the Act beginning sometime after March 31, 2005. The Committee will have up to one year to complete the review from the time it is initiated (but may be granted an extension, if needed). Their advice will be provided to Parliament. The government will then have 150 days to respond. The government may then decide whether and how to revise the Act.

This paper is intended to:

- provide background information to assist Canadians in developing and sharing their views on the issues that should be addressed during the Parliamentary Review of CEPA 1999; and,
- solicit feedback from Canadians on the issues about CEPA 1999 that Environment Canada and Health Canada have identified for consideration in preparing for the Parliamentary Review.

This paper is posted at: http://www.ec.gc.ca/CEPARegistry/review/CR_participation/CR_Scope/forward.cfm. The website and section 8 of this paper include information on how to comment on this document. The paper will also be a background document for regional public workshops to be held early in 2005. Details on the workshops will be posted on the CEPA Environmental Registry website.

In addition to this public engagement, an independent evaluation of the implementation of the Act is being conducted. This evaluation will be an important complement to the advice provided to the Parliamentary Committee in assessing the progress to date in implementing CEPA 1999. Among other things, the evaluation will determine whether:

- mandatory obligations are being met and progress is being made in realizing the Act's intended outcomes;
- issues and programs are being managed in an effective and cost-efficient manner;
- progress is being measured and reported, defensible priorities have been established, and performance measurement data and priority-setting are being used in decision-making; and
- appropriate staff and resources are in place.

The evaluation will not assess actual environmental or health outcomes, as the Act has not been in place long enough to have a measurable contribution on achieving environmental or health results.

This paper is structured around key themes related to the goal of a competitive economy anchored on a sustainable environment framework that has been described recently by the Minister of Environment. As such, it does not provide a comprehensive overview of CEPA 1999. The "plain language" *Guide to CEPA 1999* (http://www.ec.gc.ca/CEPARegistry/the_act/guide04/toc.cfm) and the CEPA Environmental Registry (www.ec.gc.ca/CEPARegistry/) provide detailed information on the Act, including virtually every aspect of the Act discussed in this paper. The annual reports to Parliament (www.ec.gc.ca/CEPARegistry/gene_info) on the administration and enforcement of the Act provide extensive information on activities and progress to date on every aspect of CEPA 1999.

SECTION 2: CONTEXT FOR THE REVIEW

The purpose of this Section is to provide readers with the context needed to allow them to critically assess issues relevant to the upcoming Parliamentary review of CEPA 1999 based on an understanding of the possible roles of CEPA 1999 within Canada's overall environmental management framework and the protection of human health. The role of the Minister of Health under CEPA 1999 illustrates the importance of the Act as a tool to protect the people of Canada against environmental risks to health. This Section also highlights the Minister of the Environment's goal for environmental management in Canada to attain "the highest levels of environmental quality as a means to enhance the well-being of Canadians, preserve our natural environment and advance our long-term economic competitiveness."

2.1 Protection of the Environment and Human Health

While economic development is essential to satisfy human needs and to improve the quality of human life, it must also be based on the efficient and environmentally responsible use of all of our scarce resources: natural, human, and economic. Without a healthy population as well as a healthy environment, long-term progress on economic development will be limited.

Health is determined by a number of factors, known as determinants, which include the quality of the physical and social environments. The mandate of the Minister of Health is broad in that it deals with health care as well as health promotion and the prevention of illness; therefore it is important to have a good balance among all determinants. With the increasing recognition of the interaction between human lifestyles and consumption patterns with the state of the environment, we know that good management of the environment can make a strong contribution to maintaining and increasing health and well-being.

2.2 Environmental Sustainability For National Well-Being And Economic Prosperity

Environmental protection is increasingly being recognized as an important determinant of the competitiveness of our economy. The emphasis on sustainable production and consumption that is helping shape the emerging global economy creates new opportunities for Canada. Companies and economies that learn how best to respond to these opportunities will have a significant competitive edge. By integrating incentives for continuous environmental improvement into the underlying drivers of the economy, Canada would achieve far more environmental and health benefits than are possible through traditional environmental regulations alone. It will be important to continue to deploy the full range of environmental policy measures in the "smartest" manner possible. With respect to risk management measures, "smart regulations" are considered to be those measures which generate social and environmental benefits while enhancing the conditions for an innovative economy.

The Minister of the Environment, the Honourable Stéphane Dion, has recently proposed the goal of a competitive economy anchored by a sustainable environment. The objective is to "attain the highest levels of environmental quality as a means to enhance the well-being of Canadians, preserve our natural environment and advance our

long-term economic competitiveness." Delivering this goal would require a collaborative approach in which environmental policies would:

- encourage and enable decision makers at all levels to integrate environmental objectives and considerations into their short- and long-term decision making;
- take a comprehensive approach to environmental issues, recognizing the interconnectedness among issues from ecological, health and competitiveness perspectives;
- be aligned among jurisdictions, and implemented efficiently;
- be mindful of basic economic and business principles;
- focus on clearly articulated long term environmental targets set through a transparent process, with appropriate incentives and penalties to drive measurable progress towards those targets; and
- recognize and reward leaders.

Achieving this goal would require determined, ongoing collaboration among all interested parties. To provide a basis for collaboration around Canada's industrial activity, Environment Canada is considering a mechanism such as permanent, multistakeholder sector sustainability tables. These tables, with appropriate representatives from governments, Aboriginal organizations, the private sector and civil society, could provide advice on how best to achieve long term environmental and health outcomes that are set by government. Through sector sustainability tables, the right mix of policy instruments, performance measures, reporting requirements and other elements could be identified to achieve long term outcomes. Governments would still need to remain accountable for setting the long-term outcomes in a transparent manner and for implementing risk management measures within their jurisdictions, including any regulatory backstops that may be required to ensure long-term outcomes are met.

The next part provides a short overview of CEPA 1999 and its relationship to other legislation as a context for understanding how it relates to the Ministers' goals.

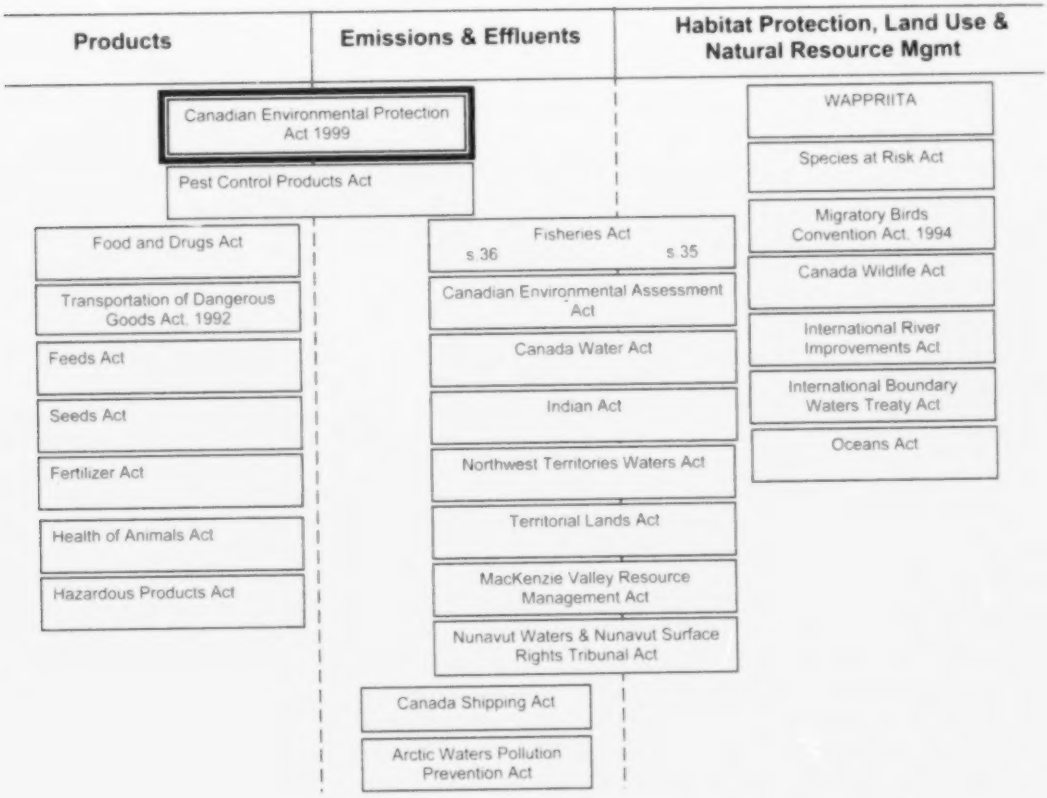
2.3 CEPA's Evolving Role In Environmental Protection In Canada

CEPA 1999 is an integral component of a complex regime of inter-related laws, policies and institutions that ensure the effective and comprehensive management of risks to human health and the environment. This regime involves the federal, provincial, territorial, Aboriginal and local governments, the judiciary, industry, civil society (used in this paper to include environmental, labour, consumer and other public advocacy organizations, and the Canadian public), and other national jurisdictions and international organizations. This regime also reflects ongoing scientific research and risk assessment activities, government-imposed and voluntary performance standards, monitoring and inspection and enforcement activities, public education and compliance promotion initiatives.

Environmental protection is a shared responsibility between the federal and provincial governments. Most of the federal government's environmental authority focuses on issues of national concern, such as toxic substances, cross-border pollution, and protection of fisheries and marine areas. As **Figure 1** illustrates, within the federal government, there are a number of laws administered by several departments and agencies which are focused on one or more of three major objectives: managing products; reducing and preventing pollution from emissions and effluents; and habitat

protection, land use and natural resource management. They address, among other things, protecting the environment and human health, developing scientific information, preventing or reducing pollution and monitoring the environment and human health. There are also several federal laws that do not directly focus on environmental and health objectives, but also have significant influence on the environment and human health. In addition, the provinces, territories and municipalities play equally important roles in managing local impacts, licensing facilities, waste management, managing land use and natural resources and protecting occupational health and safety. In short, the protection of the environment and human health is the responsibility of all Canadians.

Figure 1: Major Laws within the Federal Environmental Management Regime



Cohesive national environmental protection therefore necessitates federal-provincial-territorial cooperation as well as an amalgamation of views across the federal government. Increasingly, as Canada operates in a global economy and addresses more global environmental problems, coherence with other countries will also become more important. This is particularly the case with the United States as Canada increasingly operates in a North American context.

Recent advice to the Prime Minister made through the External Advisory Committee on Smart Regulations has observed that a key aspect of effective regulation is minimizing the need for industry to deal with different and sometimes competing regulations, and that federal-provincial-territorial cooperation is a particularly important aspect of this challenge. The committee recommended the development of overarching policy frameworks, the use of multi-stakeholder partnerships and wherever possible, the development of a "single window" for stakeholders and the public.

In the context of environmental protection, these objectives are both relevant and challenging, given the mosaic of federal, provincial, territorial and municipal laws, regulations, bylaws, policies and programs.

2.3.1 CEPA 1999

CEPA 1999 represents a significant evolution from the original CEPA. The 1988 CEPA was primarily a consolidation of the *Environmental Contaminants Act* and several, medium-specific federal statutes developed in the 1970s, including the *Clean Air Act*, the *Ocean Dumping Control Act* and Part III of the *Canada Water Act*. Several fundamental themes that promote environmental and human health protection are included in CEPA 1999 that were either not present or not accorded prominence in the 1988 CEPA. Principally, CEPA 1999:

- *makes pollution prevention the foundation of national efforts to protect the environment;*
- *increases opportunities for citizen participation;*
- *allows for more effective cooperation and partnership with other governments, Aboriginal governments and peoples, and internationally;*
- *prescribes and enables multiple processes to assess the risks to the environment and human health posed by existing and new substances in commerce (includes a more comprehensive approach to dealing with the legacy of unassessed substances: Canada is presently the only country in the world to have a legislative requirement to "categorize" existing substances);*
- *imposes timeframes for managing toxic substances;*
- *provides a wide range of tools to manage toxic substances, other pollution and wastes;*
- *allows for the most harmful substances to be phased out, or not released into the environment in any measurable quantity;*
- *includes new provisions to regulate vehicle, engine and equipment emissions;*
- *enables the implementation of various international environmental and health agreements; and*
- *strengthens enforcement of the Act and its regulations, including the range of available enforcement tools.*

CEPA 1999 also introduces various important principles and concepts, such as the precautionary principle and the ecosystem approach. In addition to directly influencing decisions made under CEPA 1999, the inclusion of these principles in the Act also plays an important symbolic role by signaling their importance to all Canadians. In this regard CEPA 1999 has had an important influence on other pieces of environmental legislation in Canada.

2.4 Strengthening Environmental Protection Management

In order to strengthen environmental management and achieve the goal of a competitive economy anchored by a sustainable environment as recently articulated by the Minister of Environment, environmental protection policies and legislation – including, CEPA 1999 – should reflect the following key attributes:

- effective **decision-making** processes, including a clear national agenda supported by federal-provincial-territorial cooperation and well functioning partnerships;
- timely access to **information** about the state of the environment and human health, and effective mechanisms to transfer that knowledge to all interested parties;
- **sound science and technology research and development** provided from all sectors of society in order to support informed decision making and stimulate innovation;
- **performance promotion** through effective rules, incentives, compliance promotion and enforcement, all premised on a "smart regulation" approach; and,
- ongoing **education** and engagement of all Canadians.

Sections 3 to 7 of this paper assess various aspects of CEPA 1999 to determine the type and extent of the role that the Act should play with respect to supporting these key attributes. Because of this thematic structure, this paper does not provide a comprehensive overview of CEPA 1999. In addition, some cross-cutting issues (such as risk assessment, for example) may be addressed under more than one theme. Readers who are not familiar with CEPA 1999 should consider reading the "plain language" *Guide to CEPA 1999* (http://www.ec.gc.ca/CEPARegistry/the_act/guide04/toc.cfm).

Each of the sections below provide some background on **"What CEPA 1999 Does"**, followed by a brief discussion on **"Should CEPA 1999 be used differently? Should the Act be changed?"** Where appropriate, these discussions are followed by a text box with a **question(s)** for the reader to take into consideration when providing their feedback.

SECTION 3: EFFECTIVE DECISION-MAKING

3.1 Overview And Key Objectives

Effective environmental decision-making is:

- predicated on **pollution prevention;**
- timely and **precautionary;**
- **transparent** and reflective of **public perspectives and values;**
- **coherent**: reflecting shared responsibilities and clear accountabilities across jurisdictions and enabling governments to speak with one voice; and
- informed by **sound science.**

This Section addresses each of these features, other than sound science, which is addressed in Section 4. This Section also discusses issues related to Aboriginal participation in environmental decision making and some of the issues related to environmental management on federal and Aboriginal lands. Each of these sets of issues goes to the heart of effective, coherent decision making.

3.2 Pollution Prevention

What CEPA 1999 Does

CEPA 1999 defines pollution prevention as "the use of processes, practices, materials, products, substances or energy that avoid or minimize the creation of pollutants and waste and reduce the overall risk to the environment or human health". Many methods of environmental protection focus on managing pollution and waste after they have been created. Pollution prevention avoids or minimizes creating the pollutants and waste in the first place.

CEPA 1999 includes many provisions designed to position pollution prevention as the priority approach for protecting the environment and human health. Section 2 of the Act requires the Government of Canada to administer CEPA 1999 in a manner that promotes and reinforces enforceable pollution prevention approaches. Part 3 requires the Minister to conduct research and studies related to pollution prevention, and to establish an information clearing house respecting pollution prevention. Part 4 gives the Minister of the Environment the authority to require the preparation and implementation of pollution prevention plans for specific substances that are on the List of Toxic Substances (Schedule 1 of the Act). Part 4 also commits the Minister of the Environment to develop and consult on guidelines respecting the circumstances under which pollution prevention planning is appropriate. Part 5 (s. 90) states that in developing proposed regulations or instruments respecting preventive or control actions in relation to substances specified on the List of Toxic Substances in Schedule 1, the Ministers shall give priority to pollution prevention actions.

The New Substances provisions in Parts 5 and 6 of CEPA 1999 are a critical element in promoting pollution prevention. They require that no new substances (i.e., chemicals, polymers and inanimate and animate products of biotechnology) are introduced into the Canadian marketplace before the proponent provides the necessary information to enable the government to determine whether or not the substances are toxic or capable

of becoming toxic to the environment or human health. The risks associated with new substances that are determined to be, or suspected of being, toxic or capable of becoming toxic may be managed, as necessary, through the imposition of handling or use conditions or the prohibition of their import or manufacture. CEPA 1999 also establishes a mechanism to require that a designated substance that has previously been assessed as a new substance must undergo further review if a significant new use is proposed.

CEPA 1999 sets a federal benchmark for the notification and assessment of new substances. There are currently five Acts and related regulations listed under CEPA 1999 that the Governor in Council has declared as meeting the CEPA 1999 environmental and health protection benchmarks with respect to new substances. New substances regulated under those five listed Acts are not subject to CEPA 1999's controls on manufacture and import. However, all other new substances, including new substances that are regulated under other Acts that are not listed in either Schedule 2 or 4 of CEPA 1999 are subject to CEPA 1999 and must be notified in accordance with the Act and the New Substances Notification (NSN) Regulations.

Part 7 allows the Minister, subject to certain conditions and Cabinet approval, to require pollution prevention plans from Canadian sources of international air and water pollution. Part 9 of the Act provides that the Governor in Council may, on the recommendation of the Minister, make regulations respecting pollution prevention and pollution prevention plans relating to, among other things, federal departments and facilities. Part 10 authorizes a judge to require anyone in violation of CEPA 1999 to prepare and implement a pollution prevention plan. Under Part 10, pollution prevention plans may be considered as part of an environmental protection alternative measure (EPAM).

The disposal at sea provisions in CEPA 1999 are also premised on pollution prevention. They require permit applicants to assess alternatives to disposal at sea and the suitability of the material proposed for disposal. If the assessment reveals opportunities for waste prevention at source, the Act requires applicants to formulate and implement a waste prevention strategy. Part 8 of CEPA 1999 provides authority to require environmental emergency plans for various substances. An environmental emergency plan describes a facility's preparations and procedures for preventing and responding to an environmental emergency.

The positioning of pollution prevention as the priority approach for protecting the environment and human health is an important new concept incorporated into CEPA 1999 and includes a specific part on pollution prevention planning (Part 4). Environment Canada and Health Canada have therefore devoted considerable resources to developing, consulting on and implementing a variety of policies, "How-To" manuals, on-line tutorials, success stories, sector specific training sessions, notices, codes of practices and guidelines to ensure consistent and comprehensive understanding of pollution prevention principles and practices as well as the legal requirements in the Act. These educational initiatives address pollution prevention across all sectors of society, including industry, businesses, communities, individuals, and governments. The *Pollution Prevention Planning Handbook* (which includes a model plan) and the *Guidelines for the Implementation of the Pollution Prevention Planning Provisions of Part 4 of the Canadian Environmental Protection Act, 1999* are two examples of efforts to promote pollution prevention. Environment Canada's National Office of Pollution Prevention maintains a website (www.ec.gc.ca/NOPP) that provides public access to all of these initiatives.

Should CEPA 1999 be implemented differently? Should the Act be changed?

- **Implementing pollution prevention**

Environment Canada and Health Canada recognize that a great deal of effort has been devoted to the "why" and "how" of pollution prevention. An important challenge is to ensure that the departments now use the pollution prevention authorities in CEPA 1999 as effectively and appropriately as possible for managing toxic substances. In addition, attaining the goal of the highest levels of environmental quality as a means to enhance the well-being of Canadians, preserve our natural environment and advance our long-term economic competitiveness will require going beyond legislation and using non-legislative incentives to encourage and enable organizations throughout Canada to implement pollution prevention more broadly as a core aspect of their ongoing operations.

Q. What are your views on this issue?

- **Keeping-clean-areas-clean**

The Canadian Council of Ministers of the Environment (CCME) Canada-wide Standard for Particulate Matter and Ozone, the Canada-wide Acid Rain Strategy for Post-2000 and the federal Clean Air Agenda include the concept of keeping-clean-areas-clean. The concept of keeping-clean-areas-clean is to promote programs in areas where air quality or acid deposition are below these agreed upon standards, by encouraging pollution prevention, best management practices and best available technology.

Q. Should CEPA 1999 provide support for the objective of keeping-clean-areas-clean? If so, how?

3.3 Precautionary Principle

What CEPA 1999 Does

The Precautionary Principle is an important concept of science-based decision making that applies throughout CEPA 1999. Section 2 requires the Government of Canada, in the administration of the Act, to apply the precautionary principle such that *"... where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."* In addition, the Act requires the Ministers to apply the Precautionary Principle when "conducting and interpreting the results" of a screening assessment, a review of a decision of another jurisdiction, or a Priority Substances List (PSL) assessment of whether a substance is "toxic or capable of becoming toxic".

The federal government released its *Framework for the Application of Precaution in Science-Based Decision Making About Risk* in July 2003. The *Framework* outlines guiding principles for application of precaution and for precautionary measures in areas of federal regulatory activity in order to describe and strengthen existing practice. Multistakeholder consultations were held on a draft of the federal *Framework* document along with a draft Guidance Document from Environment Canada and Health Canada soliciting advice on the operationalization of the precautionary principle under CEPA

1999. Environment Canada and Health Canada are currently finalizing their Guidance Document for operationalizing the Precautionary Principle in decision making under the Act.

The main challenge with respect to implementing the precautionary principle is to understand and provide useful guidance regarding the operational implications of the precautionary principle on a case-by-case basis. The precautionary principle relates to the degree of scientific certainty required to justify taking action to address a risk of serious or irreversible harm. CEPA 1999 requires the development and application of science and information to support a range of decisions, and as such all of the key decisions made under the Act are grounded on a sound scientific basis. At the same time, however, almost no decisions made on issues as complex as those related to the environment and health can reflect absolute certainty. The implications of the precautionary principle on an operational basis will therefore vary from case-to-case, reflecting both the degree of scientific certainty and the seriousness or irreversibility of the potential damage as well as other considerations.

Should CEPA 1999 be implemented differently? Should the Act be changed?

- **Vulnerable populations**

CEPA 1999 does not explicitly require that impacts on children and other susceptible groups be taken into consideration in the risk assessment and management process. In practice, human health risk assessment and management procedures, to the extent possible, currently consider available scientific information on the exposure of the substance on the most affected population group(s), including children and other vulnerable populations. The *Pest Control Products Act* (given Royal Assent in 2002, but not yet in force) requires the Minister of Health, in evaluating the health and environmental risks of a pest control product and in determining whether those risks are acceptable, to apply appropriate margins of safety to take into account, among other relevant factors, the different sensitivities to pest control products of major identifiable subgroups, including pregnant women, infants, children, women and seniors. As is the case with other decisions under the Act, where there is less than full scientific certainty, the precautionary principle can help inform decisions on actions to protect susceptible populations.

Q. *Does work under CEPA 1999 adequately consider the precautionary principle and the most vulnerable populations?*

3.4 Transparency And Public Participation

What CEPA 1999 Does

CEPA 1999 includes numerous provisions that encourage and support transparency in decision making processes, access to information and public participation. These include:

- the requirement to share information regarding decisions made or proposed under CEPA 1999 on the Environmental Registry,
- the obligation to prepare and publish the National Pollutant Release Inventory (NPRI);

- the right to request that the Minister investigate an alleged violation of the Act,
- citizen right-to-sue provisions; and
- enhanced whistle-blower protection.

CEPA 1999 also provides formal opportunities for public participation during the risk management stage. In most cases, the departments arrange some form of public consultations regarding the development of risk management strategies and measures. Specific provisions in the Act that support transparency and participation in the risk management process include:

- the right to request the addition of a substance to the Priority Substances List;
- the requirement to publish in Part I of the Canada Gazette, for 60-day public comment period, summaries of the assessment conclusions and the proposed measure (no further action, addition to the PSL, addition to the List of Toxic Substances);
- the right to comment on the scientific basis for the draft scientific assessment reports;
- the requirement to provide a 60 day public comment period on a proposed order adding a substance to the List of Toxic Substances; and
- the right to file a notice of objection and to request a Board of Review regarding a decision or a proposed regulation or order (e.g., orders adding a toxic substance to the List of Toxic Substances), or instrument (e.g., administrative or equivalency agreements).

The Act also requires the Ministers to establish the CEPA Environmental Registry. In 2003-04, the Internet-based Registry received approximately 25 000 visitors per month.

Should CEPA 1999 be implemented differently? Should the Act be changed?

Environment Canada and Health Canada have a strong commitment to communication and consultation regarding decisions taken under CEPA 1999.

Q. Does CEPA 1999 adequately enable effective transparency, access to information and opportunities for public participation?

- **CEPA Environmental Registry**

Environment Canada recognizes that an ongoing challenge will be to ensure that the Registry remains as accessible and user friendly as possible while the amount of information in it continues to grow.

Q. Are there improvements needed to the CEPA Environmental Registry to facilitate better access to information and informed participation in decisions related to CEPA 1999?

- **Mandatory review period**

Section 343 of the Act requires a parliamentary review of "the provisions and operation" of the Act every five years. More recent federal legislation requires reviews every seven years (*Pest Control Products Act* (given Royal Assent in 2002, but not yet in force) and the *Canadian Environmental Assessment Act (*as amended in 2003). In choosing a review cycle, Parliament must balance the need to keep legislation current with evolving

trends in policy against the disruption they cause to program delivery, the strain on time management and human and financial resources for all parties involved in the review process, and the need to allow enough time to pass to have adequate implementation experience to review the Act effectively.

Q. *Should the Parliamentary review of the Act be increased from every five years to every seven years?*

3.5 COHERENCE WITHIN AND AMONG GOVERNMENTS

Under the Minister of Environment's goal for a competitive economy anchored by a sustainable environment, environmental management would be delivered in a coherent, integrated manner, within and among governance structures. Coherence would be based on shared outcomes, agreement on how the outcomes are to be achieved and clear accountabilities across jurisdictions. To achieve the agreed-to outcomes, governments can determine the optimal mix of policy instruments, from the full range of their authorities. Clear accountabilities and timeframes for achieving outcomes are particularly important if there are varying means of implementation.

In Canada, coherence is needed both across government environmental policies and among environmental, health and economic policies. It can enable governments to speak with one voice. In addition, government policies should encourage and enable the private sector to integrate environmental and human health considerations into short-term and long-term decisions. A coherent approach requires collaboration among relevant jurisdictions and regulatory bodies in order to streamline regulations and policies to effectively achieve outcomes.

The permanent, multistakeholder sector sustainability tables being considered by the department are one possible mechanism for implementing a more coherent environmental and health protection agenda that is better integrated with a competitiveness agenda.

As an integral component of the Canadian environmental management regime, CEPA 1999 provides the scientific basis and knowledge for helping to set environmental and health outcomes and assessing what action needs to be taken. The Act also authorizes a range of risk management measures to help address a number of environmental and health protection issues, particularly where it is important to take a nationally consistent approach to protect the environment and health of Canadians. It also enables reporting and tracking progress towards achievement of those outcomes.

In order to ensure national environmental sustainability, a healthy population and economic competitiveness, it is important to be able to address issues identified for action under CEPA 1999 in a coherent, integrated manner. The following section examines issues related to:

- promoting national coherence and
- promoting coherence among federal laws.

3.5.1 Promoting National Coherence

A) Federal/Provincial Coherence in Managing Toxic Substances

What CEPA 1999 Does

Under CEPA 1999, once the Ministers have conducted a risk assessment of an existing substance under the Priority Substances List (PSL), a screening level risk assessment or a review of a decision by another jurisdiction, they must propose one of three measures:

- They may add the substance to the PSL. Typically, they will do this if they decide that there is a need for a more comprehensive risk assessment.
- They may recommend that the Governor in Council (the federal Cabinet) add the substance to the List of Toxic Substances (Schedule 1), and, if applicable, to the Virtual Elimination List. They will typically add the substance to Schedule 1, if they determine that the substance meets the criteria for "toxic" under the Act and that regulatory or pollution prevention or environmental emergency planning risk management measures should be taken under CEPA 1999.
- They may propose no further action. They will typically do this if they determine that the substance is not "toxic." They also may propose no further action if they determine that the substance is toxic but that actions being taken or about to be taken outside of the Act are sufficient to manage the risks in a timely manner.

For substances that the Ministers of Environment and Health propose to add to the List of Toxic Substances based on a screening level risk assessment, a review of a foreign decision or a PSL assessment, the Minister of the Environment must propose a preventive or control regulation or instrument[1] authorized under CEPA 1999 within two years of the Ministers' publication of their statement indicating this proposed recommendation. The Act then requires a final regulation or instrument within a subsequent eighteen months. A regulation developed under CEPA 1999 must apply throughout Canada. The only exception is that some regulations may apply to a part or parts of Canada for human health or environmental reasons, such as may be the case for sensitive ecosystems.

In many cases, it is necessary to address the use or release of a substance from more than one sector. This may entail the development of multiple risk management measures, including more than one instrument authorized under CEPA 1999 and/or actions taken outside of the Act.

If jurisdictions work more systematically together on national long term outcomes, using the best situated authorities to achieve these outcomes, the Ministers may in the future make more use of federal authorities other than CEPA 1999, or provincial or territorial regimes to reduce risks. This is what is envisioned in association with the mechanism of the sector sustainability tables.

CEPA 1999 provides considerable flexibility to accommodate the proposed mechanism of sector sustainability tables and it explicitly recognizes the importance of demonstrating national leadership in establishing environmental standards and ecosystem objectives.

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[1] For further explanation of what constitutes a preventive or control regulation or instrument under CEPA 1999 see the factsheet on *Identifying Risk Management Tools for Toxic Substances Under CEPA 1999* at www.ec.gc.ca/CEPARegistry/gene_info/Factsheets.cfm

The risk assessment work done under CEPA 1999 informs the development of long term outcomes. CEPA 1999 is well-situated to address risks where national consistency is required. Furthermore, it may be similarly well-situated to provide the regulatory backstop envisioned for long term outcomes.

Should CEPA 1999 be implemented differently? Should the Act be changed?

When a substance is identified as toxic, it is important to ensure timely, efficient and effective risk management. While CEPA 1999 provides the framework for identifying substances or releases that pose risks to the environment or health, it may not always be the most efficient or effective tool to manage those risks. Where the Ministers use risk management options in addition to, or as alternatives to those available in CEPA 1999 they must remain confident that the approach will be transparent and that they can monitor that the risks are being effectively managed within the expected timeframe.

In some cases, where Ministers have chosen to rely on actions taken under authorities other than CEPA 1999, but that risks are not being managed from some sources or geographical areas within the expected timeframe, they will want to act expeditiously and in a focused manner to reduce these risks.

Q. If Ministers choose the route of no further action under CEPA 1999 (i.e. a non-CEPA measure is pursued), should conditions be put in place to ensure effective accountability for protection of the environment and human health?
Q. If a non-CEPA 1999 measure is pursued, should CEPA 1999 play a backstop role? If so, how can this be done efficiently?

B) Coherence among Federal/Provincial/Territorial/Aboriginal Authorities

What CEPA 1999 Does

Part 1 of the Act requires the Minister to establish an intergovernmental National Advisory Committee (NAC), consisting of representation from federal, provincial, territorial and Aboriginal governments. The Committee advises the Ministers on decisions taken under the Act, to enable national action, cooperative action and for the purpose of avoiding duplication in regulatory activity among governments. The NAC also serves as the single window into provincial and territorial governments and representatives of Aboriginal governments on offers to consult under CEPA 1999. The Act also requires that the Minister of the Environment offer to consult with the provinces, territories and representatives of Aboriginal governments for various decisions.

CEPA 1999 also allows for action by other levels of government though administrative and equivalency agreements. It authorizes the Minister to sign administrative agreements with provincial, territorial and Aboriginal governments or with an Aboriginal people. These are work-sharing arrangements that can cover any matter related to the administration of the Act, including inspections, investigations, information gathering,

monitoring, and reporting of collected data. These agreements do not release the federal government from any of its responsibilities under the law, nor do they delegate legislative power from one government to another. To date, the Minister has entered into several administrative agreements.

The effect of equivalency agreements is that a CEPA 1999 regulation no longer applies in a province, a territory or an area under the jurisdiction of an Aboriginal government that has equivalent requirements. Equivalency agreements are possible with provincial, territorial and Aboriginal governments for CEPA 1999 regulations dealing with issues including toxic substances, international air or international water pollution, and environmental emergencies. Equivalency agreements with respect to regulations made under Part 9 may also be entered into with Aboriginal governments, such as those under the *First Nations Land Management Act*. To date, the Minister has entered into one equivalency agreement.

Should CEPA 1999 be implemented differently? Should the Act be changed?

In supporting federal-provincial-territorial-Aboriginal government cooperation, it is important for CEPA 1999 to:

- establish an efficient mechanism for entering into cooperative agreements;
- ensure that there is transparency and clear accountability; and,
- create an effective process for making adjustments, as appropriate.

- **Administrative and equivalency agreements**

Two possible limitations have been identified with respect to the administrative and equivalency agreement provisions. First, one of the reasons that only one equivalency agreement has been developed is that often laws from different jurisdictions that appear at first blush to be equivalent are in fact quite different. Even where the subject matter of the laws are the same, the specific activities/behaviours regulated, the targeted regulated communities, anticipated outcomes, and legal consequences for breaches of the law might be very different. For this reason, there have been more administrative agreements (which are akin to work-sharing) than equivalency agreements.

Second, the Act requires that all equivalency and administrative agreements terminate five years after coming into force. A 5-year lifespan may not always be commensurate with the time and effort required to negotiate these agreements. In addition, these agreements are particularly useful to support arrangements regarding Canada-wide Standards made under the Canadian Council of Ministers of the Environment (CCME). Some of the Canada-wide Standards include a 10-year time frame for achieving identified targets. The 5-year expiry date for CEPA 1999 agreements is mismatched with these 10-year time frames.

Environment Canada and Health Canada regard administrative and equivalency Agreements as important mechanisms for enhancing the efficiency of the overall Canadian environmental management regime. As such, the subject matter, scope and timeframe of these agreements can vary markedly.

Q. Should CEPA 1999 provide the flexibility to tailor administrative and equivalency agreements to appropriate circumstances?

C) Coherence with Aboriginal Peoples in Policy and Instrument Development

What CEPA 1999 Does

In addition to including representatives of "Aboriginal Governments" on the CEPA NAC, when consulting on CEPA 1999 policies and practices, Environment Canada has usually adopted an issue-by-issue approach to its engagement of all sectors of society, including Aboriginal people.

Should CEPA 1999 be implemented differently? Should the Act be changed?

Recognizing that CEPA NAC is a forum for enhancing intergovernmental cooperation, it may not be the best or only mechanism to hear and respond to the full range of Aboriginal interests on CEPA 1999. This may be particularly significant with respect to the regulatory gap on Aboriginal Lands (see 3.6, below) given that the Aboriginal members of NAC are from "Aboriginal governments" as defined in CEPA 1999,[2] and therefore are not representatives of all Aboriginal people affected by the regulatory gap.

Through other fora, Environment Canada has been working to improve Aboriginal engagement on specific issues (e.g., comprehensive Aboriginal input on proposed Petroleum Storage Tank Regulations). From this experience the department has learned that there are many other factors that must be taken into consideration to enhance Aboriginal participation. In particular, the diversity of Aboriginal interests relative to the department's capacity to effectively engage the number of interested Aboriginal groups must be considered.

Q. What are your views on this issue?

3.5.2 Promoting Coherence Among Federal Laws And Policies

What CEPA 1999 Does

The Preamble in CEPA 1999 emphasizes the need to encourage cooperation within the federal government regarding environmental protection. Section 2 of the Act (the administrative duties) also includes the obligation on the Government of Canada to

> "ensure, to the extent that is reasonably possible, that all areas of federal regulation for the protection of the environment and human health are addressed in a complementary manner in order to avoid duplication and to provide effective and comprehensive protection".

For some issues, CEPA 1999 explicitly establishes a federal benchmark. For new substances, for example, it allows for substances regulated for uses under other federal Acts and regulations to be exempt from the CEPA 1999 notification and assessment requirements if the other Act and regulation provide for equivalent notification and assessment of risks to the environment and human health. For control of toxic

[2] CEPA 1999 defines "Aboriginal government" as a governing body that is established by an agreement between the government of Canada and Aboriginal people and that is empowered to enact laws respecting the environment or respecting the registration of vehicles or engines (Part 7 of CEPA 1999).

substances, Part 5 of CEPA 1999 requires that regulations not be made if the regulation would control an aspect of the substance that is regulated under another Act of Parliament, as long as the control under that other Act provides sufficient protection to the environment and human health. A similar type of clause appears in Part 8 of the Act, governing environmental emergencies.

To control air emissions from the transportation sector, CEPA 1999 brought together the authority to regulate more coherently fuels and emissions from engines. Part 7 of CEPA 1999 provides for regulation of emissions from vehicles and engines other than those in large ships, rail and aircraft. Transport Canada has maintained authority to regulate various aspects of the ships, rail and aircraft sectors, including environmental matters, to provide a "one-window" approach for them. Transport Canada also works to provide coherence with international requirements for these sectors operating within a global context. For example, Transport Canada is currently amending regulations to reduce sulphur content of fuel for ships, which is an area that CEPA 1999 has already regulated for other engine uses.

Should CEPA 1999 be implemented differently? Should the Act be changed?

- **Managing toxics associated with products**

It is anticipated that in the future there will be an increased demand to manage the risks from toxic substances arising from the use of a product or from the end-of-life treatment or disposal of that product. In some cases, a product may contain a toxic substance that is released during the use, treatment or disposal of the product (e.g., mercury in light switches). In other cases, the use of a product may lead to the creation and release of a toxic substance. An example of this type of product is a woodstove, whose use typically releases particulate matter. CEPA 1999, as do other federal Acts, contains various authorities relevant to the management of toxic substances and products. While CEPA 1999 allows individual users of these products to be regulated, it may be more efficient, under some circumstances, to regulate the product at the point of manufacture as is done with motor vehicles and other types of combustion engines, or at the point of sale. Environment Canada and Health Canada are exploring the various complex issues raised by the challenge of managing toxics in and released from various products, including the scope of other relevant federal authorities and their implications for the appropriate role of CEPA 1999 in addressing toxics and products. The departments are interested in ensuring that no gaps exist within the federal regime for dealing with toxic substances in or released from products.

Q. *What are your views on this issue?*
Q. *How should CEPA 1999 interface with other federal authorities for the management of products?*

- **Biotechnology**

The 1993 *Federal Framework for the Regulation of Biotechnology*, as updated by the 1998 *Canadian Biotechnology Strategy*, is intended to ensure that the benefits of biotechnology products and processes are realized in a way that protects health, safety and the environment. The 1993 Framework resulted from an agreement among federal regulatory departments and agencies on principles for an efficient and effective approach to regulating biotechnology products. The 1993 Framework recognizes that

federal departments and agencies with expertise and experience related to specific classes of products will take primary responsibility for the regulation of new living organisms that fall within their sector.

CEPA 1999 was designed to strengthen this horizontal approach to regulating biotechnology products by establishing the Act as the federal benchmark for the notification and assessment of environmental and health risks and for regulating biotechnology products not regulated for uses under another federal law. Part 6 establishes a notification and assessment process for living organisms that are new animate products of biotechnology. This process mirrors the provisions in Part 5 respecting new substances that are chemicals or polymers.

Several external expert committees, including the Royal Society of Canada, the External Advisory Committee on Smart Regulations (EACSR) and the Canadian Biotechnology Advisory Committee (CBAC) have identified a growing need for a more comprehensive and coherent federal regulatory framework for the biotechnology sector. In particular, the EACSR recommended that the federal government identify, prioritize and address legislative gaps impacting biotechnology.

There are currently five statutes and related regulations listed in Schedule 4 of CEPA 1999, which the Governor in Council has declared meet the CEPA 1999 benchmarks with respect to living organisms. These include four Acts and their listed regulations administered by the Canadian Food Inspection Agency (the *Fertilizers Act*, the *Seeds Act*, the *Health of Animals Act* and the *Feeds Act*) and the *Pest Control Products Act* and its listed regulations (administered by the Pest Management Regulatory Agency). Living organisms covered under the listed Acts and regulations are exempt from requirements set out in Part 6 of CEPA 1999.

All remaining new substances fall under CEPA 1999. Regulations are in various stages of development with respect to products related to animals, fish and pharmaceuticals. In the meantime, Environment Canada and Health Canada are responsible for the health and environmental assessments of these products.

The key regulatory departments and agencies have been working closely to meet the challenges in fulfilling the goals and principles of the 1993 Framework within the constraints of their respective legislation and mandates:

- CFIA, Environment Canada and Health Canada have developed a draft notification guidance document for biotechnology derived livestock that is modeled on the *New Substances Notification Regulations*.[3]
- In 2004, Fisheries and Oceans Canada, Environment Canada and Health Canada concluded a Memorandum of Understanding (MOU), which explains how they will work together on the assessment of environmental and indirect human health effects of aquatic organisms with novel traits under CEPA 1999. Work to implement the MOU includes the development of regulations under the *Fisheries Act* that can be listed under CEPA 1999.

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3 This draft document entitled "Notification Guidelines for the Environmental Assessment of Biotechnology - Derived Livestock Animals" is posted on CFIA's website:
http://www.inspection.gc.ca/english/anima/vetbio/abu/biotech/guidedirecte.shtml

- Regulatory departments and agencies are also considering how the regulatory approaches may be adapted to address other rapidly emerging technologies, such as biobased molecular production systems (which use plants and animals for the production of pharmaceuticals and other products).

The management of biotechnology is an important and complex issue that has many dimensions – such as horizontal governance – outside of the scope of CEPA 1999.

Q. In the context of a federal strategy to build on existing legislation, is the residual role that CEPA 1999 serves adequate for assessing and managing products of biotechnology which are not covered under other federal legislation?
Q. Is the Act adequate for assessing and managing emerging developments of biotechnology?

- **Remedial measures for animate products of biotechnology**

The Act provides the Minister with the authority to take remedial measures for toxic substances under Part 5, nutrients and fuels. This allows the Minister to direct, among other things, that public notice be given by a manufacturer, processor, importer, retailer or distributor that a substance or product presents a danger to the environment or human life or health. These authorities can also be used to direct that the manufacturer, processor, importer, retailer or distributor accept return of the substance or product or reimburse the purchase price to the purchaser. The Act does not provide similar authority under Part 6 for remedial measures with respect to "animate products of biotechnology".

Q. Should CEPA 1999 authorize remedial measures with respect to animate products of biotechnology?

3.6 Federal Operations And Federal And Aboriginal Lands

What CEPA 1999 Does

Under Canada's Constitution, provincial environmental laws do not generally apply to activities of the federal Crown (e.g., federal government departments, agencies, Crown Corporations) or on federal and Aboriginal land. This means that federal activities and activities on federal and Aboriginal lands are, for the most part, not subject to the provincial, territorial and municipal regulations or permit systems on a wide range of issues (e.g., resource extraction and management, environmental protection, health and safety). This leaves a "regulatory gap". It is important, however, to note that other parts of CEPA 1999 and their respective regulations apply on all lands in Canada, including federal and Aboriginal lands.

Part 9 of CEPA 1999 was put in place to address some aspects of this regulatory gap. In particular, Part 9 provides the authority to address only those environmental protection matters falling within the purpose of the Act and the scope of the enabling authorities established within Part 9. Thus, Part 9 authorizes nationally-applied regulations and other measures to manage many, but not all, of the environmental protection risks on federal and Aboriginal lands, as defined under CEPA 1999 that would otherwise be addressed by provincial and territorial legislation.

Over the past decade, the Government of Canada has adopted policies (such as the 1992 Federal *Code of Environmental Stewardship* and the 1995 *Guide to Green Government* and *Directions on Greening Government Operations)* to address environmental performance of its operations. These policies, however, do not address private third party activity on federal and Aboriginal lands.

Mention should also be made that the environmental regulatory regime on lands north of 60° is quite different than lands south of 60°. In the Northwest Territories and Nunavut, the federal government continues to play a provincial-like role as manager of lands and resources. The situation in these two territories is to be contrasted with that in the Yukon where devolution of provincial-like jurisdiction over land and resources to the Yukon Territorial Government has taken place.

Should CEPA 1999 be implemented differently? Should the Act be changed?

Despite ongoing efforts, there remain significant environmental protection regulatory gaps with respect to Aboriginal lands and to a lesser extent on federal lands and federal operations and works and undertakings. These gaps have various significant implications.

Importantly, the gap on many Aboriginal lands and federal lands extends beyond the environmental protection ambit of Part 9 of CEPA 1999 to encompass the full range of environmental management issues, such as potable water and resource management. In particular, the resulting regulatory uncertainty is a disincentive to investment and sustainable economic growth on Aboriginal lands.

The range of municipal services, commercial and industrial activities on reserves mirrors that found off-reserve, only at a much smaller scale. The Government of Canada is committed to increasing sustainable economic activity by investing in the capacity of Aboriginal communities. The goal is to build stronger Aboriginal economies, leading to greater economic independence. This commitment is being limited, in part, by the regulatory gap. The External Advisory Committee on Smart Regulations observed that the regulatory uncertainty on reserves is a disincentive to investment and sustainable economic growth in First Nation communities.

Addressing the gap on Aboriginal land involves difficult political, economic and legal considerations, many of which extend well beyond the scope of Part 9 of CEPA 1999. Therefore, any discussions on the use of Part 9 to address the environmental protection regulatory gap on Aboriginal land must also take into account the intentions of the federal government to address the broader environmental management regulatory gap, the interests of Aboriginal people, and the need to respect Aboriginal and treaty rights. .n addition, solutions to address this gap must recognize the role and responsibilities Band Councils have over public works and commercial activity on reserves.

Considerations such as administrative efficiency and the desire to ensure a "level playing field" for public works and commercial and industrial activities suggest that, in some cases, the appropriate way to address the regulatory gap would be for the federal government to use federal legislation to incorporate by reference relevant provincial laws and regulations. Doing this through CEPA 1999 would require changes to the Act. At present, varying provincial environmental protection laws cannot be incorporated in

regulations under Part 9 of CEPA 1999 due to the requirement in Section 330(3) that all regulations developed under Part 9 apply uniformly throughout Canada. This means that private sector activities on federal and Aboriginal land operating under a Part 9 regulation may have different standards and processes to follow than their peers engaged in the exact same activities in the same province but outside of federal and Aboriginal lands.

It is important to recognize that enabling the incorporation of provincial laws under CEPA 1999 would only address the environmental protection part of what is effectively a much broader regulatory gap. It is equally important to remember that even with incorporation of provincial laws, regulations made under other parts of CEPA 1999 and other federal Acts would continue to apply.

The regulatory gaps with respect to federal activities and lands and with respect to Aboriginal lands presents ongoing challenges whose resolution requires c sidering a wide range of factors, some of which are well outside of the scope of CEPA 1999.

Q. What are your views on this issue?

SECTION 4: TIMELY ACCESS TO INFORMATION

4.1 Overview And Key Objectives

In order to support sound decisions and foster real accountability, it is important for Canadians to have timely and easy access to information about the state of their environment and about how their decisions affect their environment. This requires regular, understandable and credible signals of impacts on the environment. Monitoring environmental and human health and pollution releases, for example, is essential both to track the results of risk management programs and to help identify changes that warn of new threats.

4.2 What CEPA 1999 Does

CEPA 1999 requires the Minister of the Environment to:

- establish, operate and maintain a system for monitoring environmental quality;
- create an inventory of and publish data on environmental quality in Canada;
- publish information respecting pollution prevention, pertinent information in respect of all aspects of environmental quality; and a periodic report on the state of the environment; and
- prepare and publish the National Pollutant Release Inventory (NPRI), which provides information on releases (to air, water and land) and transfers (for disposal and recycling) of pollutants.

CEPA 1999 requires the Minister of Health to:

- collect, process, correlate and publish on a periodic basis data from any research or studies conducted relating to the role of substances in illnesses or in health problems; and
- distribute available information to inform the public about the effects of substances on human health.

4.3 Should CEPA 1999 be implemented differently? Should the Act be Changed?

- **Biomonitoring**

Biomonitoring is used to provide information about which environmental contaminants are present in the human body and at what levels. It also helps identify vulnerable populations, such as children and the elderly, at risk of exposure and health effects from specific environmental contaminants. After establishing baseline levels, biomonitoring can be used to track the impact of domestic and international actions such as control policies and public health interventions which are implemented to reduce environmental exposures and risks to health. CEPA 1999 requires the Minister of Health to conduct research and studies relating to the role of substances in illnesses or in health problems of Canadians and to disseminate that information to the public. The Act does not, however, explicitly mandate bio-monitoring.

CEPA 1999 is an important tool for the Minister of Health to use for protecting human health.
Q. Should CEPA 1999 be clarified to require the Minister of Health to conduct monitoring studies?

- **The National Pollutant Release Inventory (NPRI)**

CEPA 1999 requires the Minister to establish and publish a "national inventory of releases of pollutants". The NPRI is intended to inform policy decisions on actions to reduce pollutant releases, enable the government to monitor the progress of current actions and to identify priorities for future actions and to inform Canadians about the pollutants released in their communities.

Information reported under the NPRI is useful to a wide range of audiences, including government risk managers, industry decision makers, advocacy and labour groups, local communities and private individuals. It is not clear, however, whether NPRI data is used as widely and as effectively as possible. Among other things, some users have expressed concerns about the reliability of the information reported to the NPRI, and some argue for a mechanism for verifying NPRI data. CEPA 1999 does not explicitly authorize the Minister to require reporters to use specific estimation techniques or monitoring to complete their NPRI report; to require the reporting of information other than releases that can be used to assess and improve data quality; or to use the NPRI reporting software which incorporates many automatic data quality checks. In addition, where raw materials containing NPRI substances are sold or transferred the Act does not provide explicit authority to require the supplier to notify the receiving facility of the type and amounts of NPRI substances contained in those raw materials. Such notification would improve the ability of the receiving facility to accurately estimate releases.

Another reason the ability to verify the reported data is limited at present is that the length of time facilities are required to retain records (three years) is too short to allow for subsequent analysis and verification by government and other officials.

Some stakeholders have expressed concern about the significant administrative complexity of the current NPRI reporting requirements. Environment Canada acknowledges this concern, and is working to reduce complexity and improve guidance. For example, efforts are underway to develop a multi-functional, "one window" reporting system.

Q. Is there a need to improve the reliability of information reported under NPRI and the administrative efficiency of the program? If so, what type of changes to CEPA 1999 would you recommend?

- **Information gathering powers**

Section 71 creates extensive information gathering powers to support risk assessments. These powers are restricted to the Minister of the Environment. This means that information gathering requests relating to health assessments from Health Canada must be directed through the Minister of the Environment, which leads to administrative inefficiencies.

Q. Should the Act extend the information gathering powers in s. 71 to the Minister of Health?

SECTION 5: SOUND SCIENCE AND RESEARCH

5.1 Overview And Key Objectives

Sound science is the basis for risk assessment and management decision making in CEPA 1999. The capacity to develop shared priorities based on science is also essential for developing and delivering a shared environmental and health protection agenda.

In addition to establishing risk assessment requirements for new and existing substances, CEPA 1999 mandates certain types of scientific research and enables a wide range of other research.

Ideally, these processes would:

- provide a sound scientific basis of information to enable appropriate decisions;
- be leveraged domestically through a coordinated system of shared scientific and research activities within government, the private sector and civil society; and
- be linked to international efforts, enabling Canada to contribute to and benefit from scientific and other research occurring throughout the world on issues of interest to Canada.

5.2 Scientific And Technology Research And Development

What CEPA 1999 Does

The principle that science informs decision-making in CEPA 1999 is guided by several provisions in the preamble and administrative duties detailed in the Act. The preamble and administrative duties recognize the integral role of research and monitoring, as well as the role of traditional Aboriginal knowledge, the need to take an "ecosystem approach" and the requirement to apply a "weight of evidence approach" and the precautionary principle to guide science-based decision-making related to assessing and managing risks to the environment and human health. Numerous other provisions in the Act require and enable the generation and use of information and knowledge to promote better decision-making.

Scientific and technological research and development underpin virtually all aspects of CEPA 1999. The Act requires both the Minister of the Environment and the Minister of Health to conduct research on hormone disrupting substances. The Act authorizes research by the Minister of Environment on vehicle and engine emissions and requires research and studies related to pollution prevention, the effects of pollution on environmental quality, and to provide advisory and technical services and information related to that research. The Act also requires the Minister of Health to conduct and publish research and studies relating to the role of substances in illnesses or in health problems.

Risk management options and instruments under CEPA 1999 range broadly in nature: from guidelines and codes of practice to regulations that virtually eliminate releases of persistent and bioaccumulative toxic substances. Correspondingly, the nature of scientific and technological research and development required to support risk management is varied – from helping to identify the appropriate toxic substances and

sources of those substances to manage, to pollution abatement technology development and testing, to the development and use of precise chemical and biological testing methods and sampling techniques for confirming and enforcing compliance with regulations and other risk management measures.

Should CEPA 1999 be implemented differently? Should the Act be changed?

Environmental and health sciences are complex fields requiring the capacity to detect and understand trends over time, as well as to address emerging issues. Managing this capacity presents a challenge since it requires developing and retaining a variety of high-calibre scientists with the necessary expertise and up-to-date facilities. The effective generation and use of environmental and health research requires sustained investments. To this end, it is important to enable the government to strengthen its science and technology research partnerships and networks, and to strengthen the ability to set priorities collectively.

Q. How may current resources and capacity be used to further develop and coordinate scientific and research partnerships and activities, in order to advance scientific objectives which support decision-making under CEPA 1999?

5.3 Traditional Aboriginal Knowledge

What CEPA 1999 Does

Traditionally, Aboriginal peoples have been closely connected to the land, both spiritually and through hunting, fishing and harvesting activities. CEPA 1999 requires the Government of Canada to recognize the role of traditional Aboriginal knowledge in the process of making decisions relating to the protection of the environment and human health.

Should CEPA 1999 be implemented differently? Should the Act be changed?

Environment Canada and Health Canada understand the importance and value of accounting for traditional Aboriginal knowledge. Traditional Aboriginal knowledge has been helpful in monitoring environmental change and in detecting trends, and the departments continue to explore the potential role of traditional aboriginal knowledge in assessing risks to the environment and human health.

Q. How can Environment Canada and Health Canada most effectively include traditional aboriginal knowledge in their decision-making processes?

5.4 Sound Science And Risk Assessment Of Existing Substances

What CEPA 1999 Does

The significant expansion in commercial activities over the past century has been accompanied and supported by the development and use of a wide range of chemicals and other substances. The global production of chemicals increased 400-fold from 1930 to 2000. For the most part, this increased development and use of chemicals and other substances proceeded without systematic analysis of the risks to humans and the environment. By the early 1990s most developed countries, including Canada, had put in place legal structures to assess and manage the potential risks posed by new substances before they were introduced into the environment. Nevertheless, the legacy of chemicals that are currently in use but which entered commerce before systematic notification and assessment safeguards were introduced, must still be addressed.

The 1988 CEPA established legal definitions and consequences for existing and new substances. Among other things, the 1988 CEPA created the Domestic Substances List (DSL). The DSL includes substances that were, between 1984 and 1986 in Canadian commerce, or used for manufacturing purposes, or manufactured in or imported into Canada in a quantity of 100 kg or more in a calendar year. Any substance that is not on the DSL is a new substance and must be assessed in accordance with the Act and the New Substance Notification Regulations, prior to importation into or manufacture in Canada. In general, once a substance has been assessed under the New Substance Notification Regulations and becomes eligible for use in Canada, it is added to the DSL.

The DSL currently includes the approximately 23,000 substances from the original DSL ("existing substances") and about 2,000 that have been added to the list following their assessment under CEPA 1999 as new substances.

For the majority of the 23,000 existing substances on the DSL that have not undergone a risk assessment, there is very little data that is publicly available. This lack of publicly available information about many of the substances in current use and about their potential impacts on the environment and human health has been a cause for concern. This challenge is compounded by the limited number of qualified scientists, and the resources required from government and industry to address the volume of existing substances needing review.

These challenges are not unique to Canada, and Canada must continue to work within a global context in order to accumulate and access the data necessary to assess and manage this legacy systematically and efficiently. Canadian industry is a relatively minor player in worldwide chemical production, producing approximately two percent of the global total. The European Union, with the world's largest chemical industry, has 100,000 existing substances on their inventory, and the United States has an inventory of 82,000 substances. While these figures are not directly comparable, most of the substances on the Canadian DSL are on the European Union and the American inventories. As we share the same legacy and challenges, this represents a great opportunity to work together.

Under CEPA 1999, the departments of Environment and Health have made important strategic shifts in their approaches to assessing the risks from existing substances. The main approach required by CEPA 1988 was the Priority Substances List (PSL). The first PSL, established in 1989, comprised 44 substances or mixtures; the second PSL, established in 1995, included 25 other substances or mixtures. Both lists were compiled from substances nominated through stakeholder consultations.

Risk assessments of substances on the PSL have been quite comprehensive and rigorous, and no other country has produced 67 assessment decisions on 550 substances during the past 15 years. Nonetheless, the PSL has been found to be a time- and resource-intensive mechanism.

While the PSL remains available for conducting detailed assessments, CEPA 1999 also provides for a number of other pathways for identifying risks from existing substances. These paths are designed to enable more rapid, but still transparent and scientifically rigorous approaches for identifying substances that pose a risk to human health or the environment.

One of the important new paths under CEPA 1999 is the requirement that the Ministers review any decision by another government in Canada or of a national or state-level government of an OECD country to prohibit or substantially restrict a substance for environmental or human health reasons. The review must determine whether the substance is toxic or capable of becoming toxic, as defined by CEPA 1999.

The most extensive risk assessment pathway introduced under CEPA 1999, and the one that presents the most ongoing challenges, is the requirement to categorize and screen existing substances. The 23,000 "existing substances" on the DSL represent the Canadian dimensions of the global legacy of substances that have not yet been assessed to determine their potential impact on the environment and human health. CEPA 1999 requires that the Ministers of the Environment and Health, by September 2006, categorize these substances, together with approximately 1,200 other substances already reviewed for health impacts under the *Food and Drugs Act*.

Categorization involves the identification of those existing substances that meet the following criteria:

- are inherently toxic, and either persistent in the environment (take a long time to break down) or bioaccumulate (collect in living organisms and aggregate as they move up the food chain), or
- may present to individuals in Canada the greatest potential for exposure.

Substances that do not meet these categorization criteria require no further action under this program at this time (i.e. unless new knowledge in the future identifies a concern).

Categorization is essentially a preliminary step towards identifying priorities for risk assessment. In many cases, categorization of specific substances must rely on readily available information or the use of statistical probability analysis and theoretical modeling.

Substances that meet the specified categorization criteria must undergo a screening risk assessment. A screening assessment involves an analysis to determine whether the substance is toxic or capable of becoming toxic as defined in CEPA 1999 (see Figure 2).

These risk assessments consider both the hazard posed by a substance, together with the likelihood that sufficient exposure to a person, organism or the environment will occur such that a risk can be anticipated.

The Ministers also may recommend the addition to the List of Toxic Substances of any substance they are satisfied meets the definition of "toxic", regardless of whether the substance has followed one of the above risk assessment paths. The Ministers may, for example, rely on a risk assessment conducted under the auspices of the Canadian Council for Ministers of Environment or an international assessment that has relevance to the Canadian context.

Risk assessment for a substance involves the application of a weight of evidence approach and the precautionary principle and ends when the Ministers have sufficient evidence to conclude whether or not it is "toxic" as defined by the Act.

Figure 2: Definition of "Toxic" Under CEPA 1999

Section 64 of CEPA 1999 states:
A substance is toxic if it is entering or may enter the environment in a quantity or concentration or under conditions that

(a) have or may have an immediate or long-term harmful effect on the environment or its biological diversity;
(b) *constitute or may constitute a danger to the environment on which life depends; or*
(c) *constitute or may constitute a danger in Canada to human life or health*

Assessment Activities to Date

PSL: Of the 69 substances on PSL 1 and PSL 2, 46 have been found toxic, 21 not toxic and two assessments (ethylene glycol and aluminum salts) have been suspended in order to collect necessary data. This represents approximately 550 substances of the 23,000 on the DSL.

Decisions of other jurisdictions: In order to develop procedures to exchange information under s.75, Health Canada and Environment Canada have reviewed the basis for about 80 decisions by other jurisdictions to prohibit or restrict substances, including 16 substances prohibited or restricted for health reasons.

Screening assessments: The departments have launched a pilot project for 123 substances that require screening assessments because they meet the categorization criteria. This pilot will develop and test screening assessment procedures for individual substances as well as groups of related compounds. In 2004, the departments released for comment draft screening assessments on a group of 7 Polybromodiphenyl ethers and on perfluorooctane sulfonate, its salts and its precursors (PFOs) (which represents almost 60 substances).

Categorization: The departments are confident that they will complete the categorization process by the 2006 deadline. Implementing the requirement has involved considerable planning including consultation with stakeholders, other jurisdictions and international agencies. To date Environment Canada has developed and is seeking input on preliminary categorization decisions on 15,000 substances on the DSL, which include organic and inorganic substances, polymers and UVCBs (Unknown or Variable Composition Complex Reaction Products or Biological Materials). In 2004, Health Canada and Environment Canada released for comment proposed approaches to categorize substances against the criteria of greatest potential for human exposure, persistence, bioaccumulation and inherent toxicity. Health Canada has also refined the approach for categorizing the "inherent toxicity to humans" of the 1352 organic compounds and 642 inorganic compounds on the DSL that Environment Canada has identified as having persistent or bioacccumulative characteristics but as not inherently toxic to the environment.

Additional information can be found at http://www.ec.gc.ca/substances/ese/eng/esehome.cfm and http://www.hc-sc.gc.ca/hecs-sesc/exsd/splash.htm

Should CEPA 1999 be implemented differently? Should the Act be changed?

It is important to ensure that thorough and timely risk assessments are conducted on substances as they are identified by the categorization and other processes as being of potential concern.

It is expected that the DSL categorization process will identify a significant number of substances that will require a further risk assessment. This highlights the need for an additional priority setting process following categorization to determine which risk assessments to conduct first.

A major challenge in conducting the risk assessments is the lack of complete datasets on hazard properties, uses, releases, exposure levels and human and environmental impacts for the majority of the DSL substances. While industry has unpublished data on some of the substances, the cost and workload associated with either providing data or filling the information gaps, both to government and to industry could be substantial. Consequently, international cooperation is critical to ensuring that risk assessments are carried out in the most efficient manner possible. While Canada's goal is to be among the leaders internationally, it cannot proceed entirely on its own. Hence, Canada shares the challenge with other countries to review the thousands of unassessed substances in use globally.

It is, therefore, imperative that the departments continue to work cooperatively with Canadians, industry in Canada and abroad, other governments and international organizations. Foreign sources of data will be particularly useful; it will be very important to continue to collaborate with the United States High Production Volume Challenge Program, the High Production Volume Programme of the International Council of Chemical Associations (ICCA), the OECD Chemicals Programme and the International Programme on Chemical Safety of the World Health Organization.

Canada is the only country with a legislative requirement to categorize and do further risk assessment of all existing substances. The European Union has recognized the significant challenges to deal with existing substances. It is proposing to address these issues over the next two decades through its REACH (Registration, Evaluation and Authorization of Chemicals) initiative. Although still under discussion, REACH contemplates an EU-wide approach to identifying the risks from both existing and new substances. Environment Canada and Health Canada officials are in contact with their EU counterparts to help minimize duplication and maximize opportunities for collaboration.

Given the challenges listed above, Environment Canada and Health Canada plan to continue to:

- *use the tools provided by CEPA 1999 in the most efficient manner possible;*
- *identify opportunities and methodologies for grouping substances together by class or sector for risk assessment; and*
- *seek collaborative opportunities to improve databases and reduce resource requirements and timelines for assessments of existing substances.*

Q. What are your views on this issue?

5.5 Sound Science And Risk Assessment Of New Substances

What CEPA 1999 Does

The new substances provisions of CEPA 1999 are an integral part of the government's approach to pollution prevention because they help identify and manage environmental and human health risks before they occur. The New Substances Program was created under the 1988 CEPA. The regulations for notifying new chemicals and polymers came into force in 1994 and the regulations for notifying new biotechnology products came into force in 1997.

CEPA 1999 requires the notification and risk assessment of any "new" substance (i.e. not on the Domestic Substance List) prior to its import or manufacture. The Program processes and evaluates approximately 800 new substance notifications per year, taking the appropriate risk management actions within the prescribed timeframes. Prior to the promulgation of the *New Substances Notification Regulations (NSNR)* (Chemicals and Polymers portion) in 1994, Environment Canada and Health Canada committed to review the regulations after three years of implementation. To fulfil this commitment, the departments established a multistakeholder consultative process in 1999. The consultations resulted in recommendations for improving the NSNR and the New Substances Program, which have been implemented or are in the process of being implemented. Environment Canada and Health Canada are targeting spring 2005 for implementation of the amended NSNR.

Should CEPA 1999 be implemented differently? Should the Act be changed?

- **New substances**

In order for the new substances program to operate as efficiently as possible, the departments are continuously seeking ways to maximize the effectiveness of their inter-jurisdictional cooperation and information sharing arrangements (for example, access to and use of another jurisdiction's assessments to assist Canadian regulators in their assessments). The *New Substances Notification Regulations* allow reduced notification requirements for new chemical or polymer substances already approved in certain other jurisdictions. The departments have been very active within the Organisation for Economic Co-operation and Development (OECD) concerning the notification and risk assessment of new chemicals, and they continue to seek ways to reduce the burden to government and industry while maintaining environmental and human health protection when a new substance is being introduced into Canada, following introduction into another country.

Q. Does the Act provide adequate authority to support inter-jurisdictional cooperation in the implementation of the New Substances Program?

- **Updating the Domestic Substances List (DSL)**

New substances under CEPA 1999 are considered to be those substances that are not on the Domestic Substances List (DSL). The DSL consists of substances that were in commercial use in the mid-1980s. Some of the substances on the DSL may no longer be in commercial use. Nonetheless, CEPA 1999 does not provide the Minister the authority to remove any of the originating substances from the DSL because they are no longer in use in Canada. Removing substances not in commerce from the DSL would mean that any renewed or increased use of the substance in the future would trigger the new substances notification and assessment regime. Furthermore, because CEPA 1999 allows for the Minister to restrict approval of new substances to specific uses, an updated DSL list would provide for a case-by-case risk management response that accounts both for the properties of the substance and for its intended use(s).

If these substances remain on the DSL, Environment Canada and Health Canada are required to include them in the categorization process and to then conduct a screening risk assessment on any of them that meet the categorization criteria – even if the substance is not presently in use in Canada. This problem applies in particular to the substances categorized as persistent and/or bioaccumulative and inherently toxic. It is likely that the departments will categorize a number of substances on the DSL with these characteristics (therefore requiring a risk assessment), but which are no longer in use in Canada.

It may be more appropriate to require that the DSL be updated to remove a substance if it is no longer in commerce or its quantity in use falls below specified thresholds. The United States has an authority to require industry to submit information on the quantity and use of a substance, which is used to update their inventory of substances. Some have suggested that Canada should have a similar authority.

Q. Should CEPA 1999:

- *provide the authority to remove any of the original substances from the DSL if information determines that the is no longer used in Canada; and*
- *clarify the authority for the submission of information regarding current use patterns and quantities in use of substances on the DSL?*

SECTION 6: PERFORMANCE PROMOTION

6.1 Overview And Key Objectives

To encourage environmental innovation, governments, the private sector and civil society will need to work together to develop sectoral approaches that address as comprehensive a range of related issues as possible. The development of efficient and innovative responses by industry and other affected parties will be facilitated by setting long-term environmental performance standards. Among other things, regulations and policies should stimulate cost-effective and innovative solutions that maximize environmental performance. This will require governments to ensure that risk management tools and compliance and enforcement mechanisms promote:

- clear, long-term standards;
- strong, coherent incentives;
- support for leaders and mechanisms to minimize free riders;
- access to the full range of tools;
- sectoral approaches;
- the ability to let the most appropriate authority manage the issue; and
- transparency and accountability.

CEPA 1999 provides for a range of risk management and compliance tools. These include pollution prevention, virtual elimination and environmental emergency planning, codes of practice, regulations and some economic instruments. Compliance and enforcement mechanisms include negotiated agreements to get firms back into compliance, prosecution, compliance orders and authorities for citizens to compel investigations and to initiate legal action.

6.2 Compliance Promotion And Enforcement

What CEPA 1999 Does

Compliance with CEPA 1999 is achieved through compliance promotion and enforcement activities. Environment Canada undertakes numerous measures to promote compliance with CEPA 1999. Among others, these include:

- the maintenance of the Environment Canada Enforcement Website: see: http://www.ec.gc.ca/ele-ale/home/home_e.asp
- publication of fact sheets, guidelines, reports, and technical bulletins, including the CEPA 1999 Compliance and Enforcement Policy: see: http://www.ec.gc.ca/CEPARegistry/enforcement/
- direct communication and consultation with the regulated community and members of the public (e.g., workshops, presentations at stakeholder meetings, letters, interviews); and
- promotion of environmental audits.

Enforcement activities include:

- inspections to verify compliance;
- investigations of alleged offences;

- measures to compel compliance without resorting to formal court proceedings (e.g., warnings, tickets, environmental protection compliance orders (EPCOs), and orders by the Minister);
- measures to compel compliance following the laying of charges and through civil and criminal court actions (e.g., environmental protection alternative measures (EPAMs), injunctions, prosecutions, court orders upon conviction, and civil suits for recovery of costs); and
- intelligence gathering.

Many of these powers and tools were first introduced in CEPA 1999, including the authority for EPCOs and EPAMs. In addition, the Environment Canada enforcement function underwent considerable public scrutiny in the late 1990s. At that time, it was generally recognized that Environment Canada did not have adequate human and financial resources, nor did it have effective administrative structures in place to secure compliance with CEPA 1999. In recent years, Environment Canada has received significant new resources to enhance the enforcement functions and fully utilize the enforcement powers conferred by CEPA 1999.

Enforcement officers have all the powers of a peace officer, including the right to enter premises, conduct tests and measurements, take samples and access data stored on computers, obtain search warrants, stop any means of transport, and search and seizure. CEPA analysts are entitled to accompany enforcement officers and have access to the inspection powers conferred on the officer.

Should CEPA 1999 be implemented differently? Should the Act be changed?

Environment Canada is increasing capacity in its compliance promotion and enforcement program. This includes the adoption of a compliance assurance program to monitor, evaluate and help prioritize promotion and enforcement initiatives.

CEPA 1999 provides broad authorities to enforce the Act and its regulations.

Q. What are your views on this issue?

6.3 SCHEDULE 1

There are various issues related to the use of Schedule 1, the List of Toxic Substances as the mechanism for listing substances found to meet the criteria for "toxic" under CEPA 1999.

6.3.1 Use of the term "toxic"

What CEPA 1999 Does

The criteria in CEPA 1999 for designating a substance as "toxic" focus on risks resulting from the combination of both the inherent hazardous characteristics of a substance, as well as the potential for its exposure to humans or to the environment. As a result, in some cases, a substance may have relatively low hazardous characteristics but be declared "toxic" where exposure to the environment or humans is significant, and evidence establishes existing or potential significant harm to humans or the environment.

Should CEPA 1999 be implemented differently? Should the Act be changed?

Some stakeholders argue that labelling a substance that has a low hazard but high exposure to be "toxic" is misleading and creates an inappropriate stigma. Some others suggest that the label "toxic" is appropriate to designate all substances assessed as posing a risk to human health or the environment.

With respect to the term "toxic", other jurisdictions use different terminology to describe high risk substances, without referring to the substance as "toxic." For example, the European Union's proposed REACH program would use functional terms to designate whether substances are "authorised" for particular uses or have been "restricted." There may be other terms that could be considered in the context of CEPA 1999.

A related issue is that, when the government adds a substance to the List of Toxic Substances, the List does not describe the nature of the risk posed by the substance (degree, target organism or media). Without this information, there is the potential for the public to assume that the type and degree of risks posed by all substances on the List of Toxic Substances are equivalent.

Q. Should the Act provide an alternative approach to the designation of substances?

6.3.2 Process of adding a substance to Schedule 1

What CEPA 1999 Does

Once the Ministers have conducted an assessment on a substance through a screening level risk assessment, a Priority Substances List assessment or the review of a decision of another jurisdiction, they may propose one of the following measures:

- no further action,
- addition to the Priority Substances List, if it is not already on that List; or
- recommend to the Governor in Council that the substance be added to the List of Toxic Substances (Schedule 1 of the Act) and if applicable, to the Virtual Elimination List.

When the Ministers recommend to the Governor in Council that the substance be added to the List of Toxic Substances, the Governor in Council must be satisfied that the substance is toxic based on conclusions from the risk assessment. A proposed order for adding the substance must be published in the Canada Gazette for 60 days, to provide an opportunity for public comments. At this time, any member of the public may also file a notice of objection along with the reasons for the objection and request a Board of Review be undertaken.

The addition of the substance to the List of Toxic Substances does not put in place any risk management measures for the substance. When a substance is on the List, it allows the Minister to use the Act to require the preparation of pollution prevention plans or environmental emergency plans or for the Governor in Council to use the regulatory authority under the Act to reduce the risks posed by these substances.

Adding a substance to Schedule 1 publicly signals the intent to manage the substance under the regulatory authorities of CEPA 1999. The current listing process requires the involvement of the Governor in Council (the federal Cabinet) twice: first to propose placing the substance on Schedule 1, and second, to formally add it to the Schedule if appropriate. In the risk management step, if a regulation is determined as the most appropriate management tool, the Governor in Council will be involved again in two further steps: first when proposing the regulation; and second when finalizing the regulation. Risk management decisions have direct socio-economic implications, and typically are supported by a range of information on technical capacity and socio-economic impacts as well as scientific considerations related to risks. The fact that the listing decision is subject to the approval of Cabinet highlights the serious nature of the risks posed by the substance, but does not in itself determine or put into effect the actions needed to manage the substance.

Should CEPA 1999 be implemented differently? Should the Act be changed?

In an effort to ensure decision-making based on the right information, it may be appropriate to consider alternatives to the current process for listing a toxic substance.

- The process needs to focus the discussions on the risk assessment and on socio-economic issues at the right stage. Discussions around the results of the risk assessment should focus on the merits of the evidence, analysis and conclusions; whereas any discussions around the risk management stage should also include environmental and health objectives and socio-economic considerations.
- The risk assessment discussion needs to have clarity on the understanding of the factors considered in the analysis of whether or not a substance is "toxic".

Currently, the Governor in Council (GiC) decision to add a substance to Schedule 1 is based only on the risk assessment report. Rather than this current approach, there might be other ways to achieve more focused decision making, for example:

- The Governor in Council could retain authority to add substances to the List; however, the addition of the substance could be considered at the same time a risk management measure is proposed. In other words the decision making regarding the listing and the risk management of the substance would occur simultaneously.

- Alternatively, the Ministers could have the authority in the Act to add substances to a list, similar to the process for the DSL. The proposal to add a substance to this list could still be published in the Canada Gazette for public comment. Ministers would still need to recommend to the Governor in Council any proposed regulatory action. Public scrutiny and consultation would occur both for measures taken using Ministerial authorities and for regulatory actions by the Governor-in-Council.

Environment Canada and Health Canada recognize that changes in the listing process would have various implications that would have to be addressed, including the current linkages between Schedule 1 and:

- the triggering of "timeline" requirements for risk management in Part 5 of the Act,
- the Governor in Council authorities to regulate under Section 93, and
- the Ministerial authorities to require the preparation of pollution prevention plans under Part 4 of the Act (which is currently enabled when a substance is added to Schedule 1 by the Governor in Council), or environmental emergency plans under Part 8 (which is currently enabled when a substance is added to Schedule 1 or when the Ministers' recommend to add a substance to Schedule 1).

It is important to consider the use of the term "toxic", along with any proposed changes to the process for adding a substance to a list.

Q. Should the Act provide an alternative approach to the listing of substances that have been determined to be toxic?

6.4 Economic Instruments

What CEPA 1999 Does

In order to fundamentally change production and consumption patterns to promote the goal of a competitive economy anchored by a sustainable environment outlined at the beginning of this paper, it will be essential to make greater use of economic instruments as part of the mix of risk management tools.

CEPA 1999 authorizes the use of three types of economic instruments for managing risks.

- It authorizes the use of deposit refund schemes in conjunction with regulations under s.93 (for toxic substances), s.118 (for nutrients) and s.209 (for the "federal house"). To date, deposit-refunds are used primarily by the provinces and municipalities for waste management issues related to various products and substances, and the federal government has made little use of these measures under CEPA 1999. It is anticipated, however, that as the focus under CEPA 1999 turns increasingly to include product-related issues, the Minister may choose to use deposit-refunds more frequently to help manage toxic substances.
- It authorizes the use of tradable units.
- It also authorizes the Minister to make regulations prescribing "fees" to be paid for a service, the use of a facility, right, privilege or any process or approval.

Should CEPA 1999 be implemented differently? Should the Act be changed?

The limited range of economic instruments authorized under the Act and the limitations associated with tradable units and fees restrict the departments' ability to manage risks as efficiently as possible and to ensure that the market fully accounts for environmental costs.

There may be merit in expanding the existing authorities in order to overcome some of these limitations. The experience with tradable units in other jurisdictions, for example, suggests that auctioning can enhance the economic efficiency of this tool by reducing up-front government administrative costs and by fully utilizing market forces to establish the value of the units.

Q. Should the Act include additional authority regarding economic instruments?

6.5 Virtual Elimination

What CEPA 1999 Does

While some substances added to the List of Toxic Substances may be prohibited, the risks posed by most substances designated as "toxic" under CEPA 1999 can be reduced to acceptable levels through better management of their use. There are, however, toxic substances that are persistent, bioaccumulative and present in the environment primarily as a result of human activity. For substances meeting these criteria, the Minister is obliged to add them to the Virtual Elimination List. To date, only one substance has been proposed for addition to the Virtual Elimination List.

When a toxic substance is added to the Virtual Elimination List, the Act requires the Minister to identify the "level of quantification" (LoQ). The LoQ is the lowest concentration at which the substance can be measured using sensitive but routine sampling and analytical methods. When the virtual elimination provisions of CEPA 1999 were drafted, it appears the level of quantification was anticipated for concentrations of substances in emissions released from a stack or in effluents coming out of a pipe. The current challenge under the Act is trying to determine the LoQ for a substance that is in a product.

Should CEPA 1999 be implemented differently? Should the Act be changed?

It may not always be appropriate or even possible to establish an LoQ for a substance that has been placed on the Virtual Elimination List. For example, it may not always be necessary to determine an LoQ for a substance whose use will be prohibited. In addition, experience to date suggests that it may be extremely difficult scientifically and costly to establish an LoQ for a substance that is in an article or product. It may be more appropriate to consider direct investments in new technologies or product substitutes to eliminate the release of these substances, rather than investing in technologies to measure their releases.

Q. Should CEPA 1999 require an LoQ for every substance being added to the Virtual Elimination List?

6.6 Hazardous Waste And Hazardous Recyclable Materials

What CEPA 1999 Does

CEPA 1999 provides the authority to control the transboundary movement of hazardous wastes and hazardous recyclable materials in an environmentally sound manner. It requires notification and consent from the receiving jurisdiction, and authorizes Environment Canada to establish permitting conditions and procedures. This authority helps implement Canada's obligations under three international agreements (the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal*, the *OECD Council Decision Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations*, and the *Canada-U.S.A. Agreement Concerning the Transboundary Movement of Hazardous Waste*.)

Provincial and territorial governments also play an important role in the management of hazardous wastes and hazardous recyclable materials. Provinces and territories regulate the intraprovincial transportation of dangerous goods, including hazardous wastes and hazardous recyclables. They also regulate the siting, design and operation of disposal and treatment facilities.

Should CEPA 1999 be implemented differently? Should the Act be changed?

- **Updating permits**

Many of the important issues related to the federal hazardous waste and hazardous recyclable regime relate to the regulations established under this Division. For example, under the current regulations, the Minister does not have the authority to revoke or change the terms of an import or export permit, once it has been issued, even if circumstances change. Similarly, the Minister cannot include in the permit conditions related to the duration of the permit or the conditions under which it may become invalid.

Q. Should the Act enable export/import permits to adapt to changing circumstances?

- **Export reduction plans**

The Act authorizes the Minister to require an exporter of hazardous waste to prepare a plan "for the purpose of reducing or phasing out the export of hazardous waste or prescribed non-hazardous waste for disposal." This provision may have limited utility in that it focuses on reducing exports when the over-riding environmental objective should be to reduce the generation of waste. Provinces and territories, and to some extent municipalities, play a major role in setting policies to reduce wastes. Furthermore, focusing on reducing exports of wastes may not achieve the best environmental outcomes given that it may be better to ship to a closer facility in the United States that operates in an environmentally sound manner than to transport wastes a greater distance to a Canadian facility. In addition, the provisions apply to "exporters". In most cases, exporters are waste management companies, and as such are not the generators of the waste. Waste management companies have very little ability to reduce the generation of hazardous waste.

Q. Are the export reduction planning provisions effective, or should they be clarified or removed from the Act?

6.7 Fuels And Vehicle and Engine Emissions

What CEPA 1999 Does

Emissions from the combustion of fuels are controlled through improved fuel quality and engine emission controls. CEPA 1999 contains authority for fuel quality regulations and for vehicle emission regulations previously under the *Motor Vehicle Safety Act* and also new authority to regulate emissions from off-road engines. These authorities allow an integrated system approach to reducing harmful emissions to protect human health and the environment. The vehicle, engines and fuels program parallels the more progressive aspects of other countries' regulations, including the United States. This provides for combined environmental and economic benefits in North America. There has been extensive activity under these provisions of CEPA 1999.

The Governor in Council on the recommendation of the Minister has made the *On-road Vehicle and Engine Emission Regulations* and the *Off-road Small Spark-Ignition Engine Emission Regulations*. Between 2004 and 2010 increasingly tight emission standards for carbon monoxide, hydrocarbon, oxides of nitrogen and particulates come into effect for cars, trucks and buses. The allowable limits of these emissions are reduced by up to 95% relative to earlier standards, depending on the vehicle type. Regulations for small engines, such as lawn and garden equipment, come into effect in 2005 and these will be followed by regulations addressing diesel engines (e.g. construction, agriculture), marine spark ignition engines and off-road recreational vehicles.

Environment Canada has also developed fuel quality regulations. The *Sulphur in Gasoline Regulations* limit sulphur to an average limit of 150 mg/kg as of July 2002, and require a further reduction to an average of 30 mg/kg starting in January 2005. The *Sulphur in Diesel Fuel Regulations* set a maximum limit of 15 mg/kg for sulphur in on-road diesel fuel starting June 1, 2006. Until June 1, 2006, the limit is 500 mg/kg. Additional information is available at: http://www.ec.gc.ca/energ/fuels/fuel_home_e.htm

Should CEPA 1999 be implemented differently? Should the Act be changed?

- **Vehicle and Engine Emissions**

While CEPA 1999 contains several elements designed to facilitate incorporation of United States emission standards, some aspects of the Act impede alignment with U.S. rules. For example, CEPA 1999 does not explicitly enable adoption of a system like the one in the US, which requires warranties on emission control components.

Q. Should CEPA 1999 enable further alignment with emission control standards of other countries, including the U.S.?

- **Fuels**

CEPA 1999 does not include specific authorities to address fuels as they move through the distribution system. For example, there may be instances where it would be desirable to:

- control fuel quality downstream of the production point (for example, additives are often added downstream of refineries); and
- implement record keeping, reporting and tracking requirements within the distribution system (some fuel characteristics are very difficult to test for at the sale point – hence, it may be appropriate to require product transfer documentation to establish that the fuel is not adulterated as it is distributed).

These concerns are particularly acute where a "middle person" may modify and then redistribute fuels for retail sale. To illustrate, the US regulations for gasoline deposit control apply to all persons involved in the distribution system.

Q. Should CEPA 1999 include authorities to address fuels as they move throughout the entire distribution system (from the refinery to the service station)?

6.8 Sale of New Substances

What CEPA 1999 Does

The main focus of the new substances regime is on preventing the introduction of unacceptable risks by reviewing new substances before they enter into Canadian commerce. Although the Act and the New Substances Notification Regulations require an assessment prior to the introduction of a new substance to Canada, the Act currently does not explicitly allow the Minister to prohibit the sale or use of a new substance by third parties that has been manufactured in or imported into Canada in contravention of the Act. One situation where this can arise is when a substance is redistributed to a third party for retail sale.

Should CEPA 1999 be implemented differently? Should the Act be changed?

The Act could be clarified to enable effective intervention at the point of sale or use to prevent unassessed new substances from entering Canadian commerce.

Q. Should CEPA 1999 be clarified to ensure that the Minister can prohibit the sale or use of a new substance that has been manufactured in or imported into Canada prior to completion of its assessment?

6.9 Disposal At Sea

What CEPA 1999 Does

CEPA 1999 prescribes a permit system for controlling disposal at sea. This permit system has been in place since 1975, and meets Canada's obligations as a Party to the international conventions that address disposal of wastes at sea (the London Convention and its new 1996 Protocol). Each permit is assessed on a case-by-case basis under a framework set out in Schedule 6 and is only considered for the six substances listed in Schedule 5.

Permits are issued only if the proponent demonstrates that there are no practicable uses for the material and that disposal is not only acceptable but also the best management option. Criteria used include environmental costs, human health and economic factors. The program operates on a cost-recovery basis. Environment Canada recovers costs associated with permit processing and with monitoring of representative disposal sites. There is no minimum volume below which a permit is not required.

Basic information on permits issued under CEPA 1999 is available online at the CEPA Environmental Registry. As well, all proposed disposal at sea projects are reviewed under CEAA and are registered in the CEAA Registry.

Should CEPA 1999 be implemented differently? Should the Act be changed?

- **Requirement to publish permits in the Canada Gazette**

All disposal at sea permits and permit amendments must be published in the Canada Gazette for 30 days before they come into force. There are questions about the cost-

effectiveness of this requirement. Not a single comment or objection related to ocean disposal permits has been received from the public through the Canada Gazette process since CEPA 1999 came into force. This reflects the fact the public is engaged long before a permit is issued in various ways, including through the CEPA Environmental Registry. It may be appropriate to remove the requirement to publish permits and permit amendments in the Canada Gazette, and replace it with a requirement to place a copy of the permit or permit amendment on the CEPA Environmental Registry.

Q. Are there benefits to the CEPA 1999 requirement that disposal at sea permits be published in the Canada Gazette for a 30 day period?

- **More flexibility for a permit's term**

Permittees who dispose of dredged material at locations with no history of contamination have requested permits that are for longer than the one-year maximum imposed by CEPA 1999.

Q. Should more flexibility be accorded for a permit's term?

- **Fisheries Act Issues**

CEPA 1999 states that the provision prohibiting pollution under the *Fisheries Act* is not applicable if a substance is disposed of in accordance with a disposal at sea permit issued under CEPA 1999. Other sections of the *Fisheries Act*, however, which relate to alteration of or destruction of fish and fish habitat, are still applicable. The application of both laws for this activity should be considered in terms of both its effectiveness and efficiency.

Q. What are your views on this issue?

6.10 Environmental Matters Relating to Emergencies

What CEPA 1999 Does

Environmental emergencies resulting from a leak, explosion, fire or release of a hazardous substance can happen at any time of the day or night, in any region of Canada. There are an estimated 20,000 environmental emergencies annually in Canada. About 9,000 emergencies get reported to Environment Canada in any given year, and about 1,000 of these require some form of involvement or action by Environment Canada. These incidents are primarily the result of accidents, improper maintenance or human error.

Part 8 of CEPA 1999 provides authority to require environmental emergency plans for substances once they have been declared toxic by the Minister of the Environment and the Minister of Health and have been added or are recommended for addition to the List of Toxic Substances (Schedule 1). An environmental emergency plan outlines a facility's prevention, preparedness, response and recovery activities to reduce the likelihood and consequences of an environmental emergency involving toxic substances.

Environmental emergency plans may also be needed for substances other than those that are toxic under CEPA 1999, if they pose a danger to the environment or human health because of their flammability, reactivity, etc. The *Environmental Emergency Regulations*, which came into force in November 2003, contain a list of the substances for which environmental emergency plans must be prepared.

Should CEPA 1999 be implemented differently? Should the Act be changed?

Environment Canada's environmental emergencies officers have an important role to play in the prevention of, preparedness for, and response to environmental emergencies. CEPA 1999 does not explicitly provide for environmental emergencies officers. As a result, they must be designated as enforcement officers in order to be able to fulfill their functions. Environmental emergencies officers do not require the full powers of an enforcement officer. The powers they currently use include the authority to be notified about an emergency, the right to access the site, to conduct an inspection to determine if adequate remedial measures are being taken, to give directions to take preventive or remedial measures and to collect information. Designation of environmental emergencies officers as enforcement officers has led to confusion among the regulated community. Environmental emergencies officers do not focus on verifying compliance with the Act and its regulations. Their focus is to ensure prevention of an environmental emergency and, if an emergency has occurred, to ensure that the necessary emergency response measures are taken to protect the environment and public safety. It may be more efficient for the program and less confusing to the regulated community for the Act to provide for a distinct category of environmental emergencies officers with appropriate powers.

Q. *Should CEPA 1999 authorize the designation of qualified persons as environmental emergencies officers?*

SECTION 7: EDUCATION – PROMOTING UNDERSTANDING

7.1 Overview and Key Objectives

Education is essential to enable decision makers within governments, the private sector, civil society and members of the public to better understand and communicate concepts involving risk, and to make informed judgments and choices. Effective education requires going beyond the ongoing and relevant generation of information to the sharing and communicating of that information in an understandable, timely manner.

The authority and activities required to fulfill this function extend well beyond the scope of any single government or piece of legislation. Within the context of CEPA 1999, therefore, it is important to ensure that the various educational activities under the Act function as effectively as possible and that they fit into a coherent overall effort to effectively communicate and promote understanding and capacity for informed environmental decision making

7.2 What CEPA 1999 Does

As Section 4 of this Paper outlines, CEPA 1999 both mandates and authorizes the generation of a wide range of information to help support informed decisions. These include the various research requirements and the monitoring provisions. The Act also provides numerous mechanisms for sharing knowledge. These include, for example, the NPRI, the CEPA Environmental Registry, the requirement in Part 3 of the Act to develop environmental quality objectives, environmental quality guidelines, release guidelines and codes of practice, the requirement in Part 4 to develop guidance material on pollution prevention planning and the authority to develop and publish a model pollution prevention plan and a national clearinghouse for information on pollution prevention.

Much of what CEPA 1999 authorizes and many of the activities undertaken by Environment Canada and Health Canada to implement the Act go beyond the generation of information to encompass educational functions intended to ensure that affected and interested parties understand issues, activities, requirements, objectives and best practices. For example, as Section 6 of this paper outlines, Environment Canada undertakes extensive compliance promotion and technical assistance activities to ensure that all relevant parties understand their obligations under the Act and are enabled to comply with them in the most efficient and innovative manner possible.

7.3 Should CEPA 1999 be implemented differently? Should the Act be Changed?

The type of enhanced policy coherence that lies at the heart of the goal of a competitive economy anchored by a sustainable environment outlined in Sections 2 and 3 of this document will go a long ways towards improving public awareness and understanding. Clear, national standards and harmonized approaches to risk management will enable decision makers across all sectors to better understand and communicate issues and obligations.

One of the key requirements for effective environmental policy is the capacity to understand and explain the impact of various policies. Environment Canada is in the process of enhancing its capacity to assimilate the wide range of information to which it has access through its monitoring, science and other activities under CEPA 1999 to enable it to track and report on the impacts of the various risk management measures it implements under the Act. It will be important to ensure that the department also develops the capacity to communicate this information so that affected parties throughout Canada can make informed judgments about the value-added of CEPA 1999 risk management measures.

Q. What are your views on this issue?

- **Indicators and Environmental and Health Prediction**

Common, standardized indicators and scenarios which predict or forecast environmental and health quality are important tools in helping support informed decisions. They can support judgments about the state of the environment and health and about the need for or impact of risk management measures. They can also help clarify the linkages between environmental and health impacts and economic development. CEPA 1999 supports the generation of a wide range of information that could be helpful to decision makers beyond those for whom it is primarily generated if it was linked to indicators and prediction.

Q. What are your views on this issue?

- **Risk communication**

The goal in communicating information related to risks is to enable decision makers in government, industry and the public to make better decisions based on the best available information. Clear descriptions of known risks can also ensure that incomplete evidence is not misinterpreted as evidence of no effect. To accomplish these objectives, descriptions of risks identified or assessed under CEPA 1999 should:

- clearly describe the Departments' assessment of the risk and of its significance;
- explicitly acknowledge and communicate the nature and significance of uncertainties; and,
- identify opportunities and possible costs and timelines associated with further work to reduce uncertainties.

Effective risk communication, including transparency and public engagement is particularly important to the application of the precautionary principle. As the federal Framework emphasizes, where the public has low tolerance for serious or irreversible harm characterized by scientific uncertainty, a greater degree of transparency, clearer accountability and meaningful public involvement can enhance credibility of and trust in Government decisions, as well as resolve conflict or facilitate joint problem solving. Effective risk communication requires risk assessors and managers to provide understandable information about their findings, their assumptions and the associated judgments and uncertainties.

Q. What are your views on this issue?

SECTION 8: CONCLUSIONS AND NEXT STEPS

This Scoping Paper has outlined a number of challenging issues to the successful attainment of the goal of CEPA 1999 to promote pollution prevention and to protect the environment and human health in order to contribute to sustainable development. It represents the initial views of officials in Environment Canada and Health Canada based on just over four years of experience with the Act. It is intended to help all interested parties prepare for the forthcoming five-year Parliamentary review of CEPA 1999.

The departments welcome your feedback on the issues that from your perspective should be addressed during the Parliamentary review and will use your feedback to help in preparation for the forthcoming Parliamentary review. To facilitate your feedback the departments have established a web-based consultation mechanism.

Anyone with an interest in CEPA 1999, both its evolution as a key piece of federal legislation to protect human health and the environment and its implementation, is encouraged to provide feedback.

Beginning in late January, 2005, Environment Canada and Health Canada will also sponsor regional, day-long public consultation workshops in six cities across Canada to solicit feedback on this Scoping Paper. The purposes of these workshops include:

- hearing from Canadians on the challenges in CEPA 1999 they feel need to be addressed during the Parliamentary Review; and
- inviting feedback from Canadians on the solutions that Environment Canada and Health Canada have identified as priorities for consideration in preparing for the Parliamentary Review.

All workshops are open to anyone with an interest in CEPA 1999; there is no registration fee for attendees. The workshop agenda will be structured around this Scoping Paper. Environment Canada's CEPA Environmental Registry website, found at http://www.ec.gc.ca/CEPARegistry/review/CR_participation/default.cfm has information pertaining to the public consultation workshops. Prior to the workshops, this website will have additional information on the workshops, including the exact dates, cities and venues, the agenda, and references to background information to assist your understanding of the Act.

Following all feedback received, the departments will develop a Workshop Report that will be posted on the CEPA Environmental Registry.

If you require additional information please contact:

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